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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/760,508   | 01/20/2004  | Shigeru Sugaya       | 7217/71467          | 1464             |
| 530  | 7590        | 08/27/2007           | EXAMINER            |                  |
| LERNER, DAVID, LITTENBERG,<br>KRUMHOLZ & MENTLIK<br>600 SOUTH AVENUE WEST<br>WESTFIELD, NJ 07090 |             |                      | CHOU, ALBERT T      |                  |
|  |             | ART UNIT             |                     | PAPER NUMBER     |
|  |             | 2616                 |                     |                  |
|  |             | MAIL DATE            | DELIVERY MODE       |                  |
|  |             | 08/27/2007           | PAPER               |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                 |                 |
|------------------------------|-----------------|-----------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)    |
|                              | 10/760,508      | SUGAYA, SHIGERU |
|                              | Examiner        | Art Unit        |
|                              | Albert T. Chou  | 2616            |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 January 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,4,12,13 and 20 is/are rejected.  
 7) Claim(s) 3,5-11 and 14-19 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 20 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to "a computer-readable program" *per se*, which is considerable non-statutory subject matter (see MPEP 2106.IV.B.1(a) and USPTO Interim Guidelines pp. 50-57).

In order to get claim 20 in compliance with the USPTO Interim Guidelines regarding statutory subject matter eligibility, a change to, for example, "A computer-readable storage medium storing computer-executable instructions for executing a radio communication process in a radio communication environment in which a plurality of adjacent radio networks have overlapping service areas, said instructions, when executed, comprising:" is required providing that "A computer-readable storage medium storing computer-executable instructions for executing a radio communication process in a radio communication environment in which a plurality of adjacent radio networks have overlapping service areas" is disclosed in the specification.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "*when a new radio communication device is detected, an authentication verification is performed between said new radio communication device and, when said authentication is successful, said new radio communication device is registered in said connection list; and when said authentication fails, said new radio communication device is registered in said non-connection list.*" It is not clear what entity or entities are involved when an authentication verification is performed.

Furthermore, claim 1 recites "a connecting communication device", "a non-connecting communication device", "a surrounding radio communication device", and "a new radio communication device". The use of terminology "communication device" should be consistent if they refer to the same particular communication device.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 4, 12, 13 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Pub. No. 2003/0063619 A1 by Montano et al. (hereinafter "Montano").

Regarding claims 2, 12 and 20, Montano teaches a radio communication device, a radio communication method and A computer-readable storage medium storing computer-executable instructions for executing a radio communication process for operation in a radio communication environment in which a plurality of adjacent radio networks have overlapping service areas, comprising, [Figs. 3, 13 & 14]:

**communication means for communicating radio data [Fig. 3; Devices 321-325 are wireless devices which communicate with each within Network 300; pars. 0008, 0014];**

**control means for controlling radio data communication of said communication means [Fig. 3; Devices 321-325 are wireless devices which control communication with other wireless devices within Network 300; pars. 0008-0014];**

**notification means for notifying an existence within a service area of said communication means [Figs. 3 &13, steps 1325, 1330; if a new device receives no signal, it will assume that there is no network and will start a new network with itself as the coordinator and send out a new beacon to notify its existence within a service area; pars. 0216-0219];**

terminal detection means for detecting an existence of another radio communication device within said service area of said communication means [Figs. 3 &13, steps 1305, 1310, 1315, 1320, 1335; a new device will check to see whether it hears a beacon from an existing network; Abstract, pars. 0055, 0216-0223]; and connection management means for managing connection/non- connection of said other radio communication device detected within said service area [Fig. 13, step 1340; Fig. 14, steps 1405, 1410, 1415, 1420, 1430; the device performs an association with the coordinator of the network (another network device) by requesting to join the connection or non-reconnection if all beacons are assigned; pars. 0221, 0224, 0226-0230].

Regarding claims 4 and 13, Montano teaches a radio communication device and a method, wherein:

    said notification means notifies the existence of the radio communication device by transmitting a beacon signal with a predetermined frame period via said communication means [Figs. 3 &13, steps 1325, 1330; if a new device receives no signal, it will assume that there is no network and will start a new network with itself as the coordinator and send out a new beacon to notify its existence within a service area; pars. 0216-0219]; and

    said terminal detection means detects the existence of another radio communication device by receiving said beacon signal from said communication means [Figs. 3 &13, steps 1305, 1310, 1315, 1320, 1335; a new device will check to see

**whether it hears a beacon from an existing network; Abstract, pars. 0055, 0216-0223].**

***Allowable Subject Matter***

4. Claims 3, 5-11 and 14-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent No. 7,120,129 to Ayyagari et al. disclose "System And Method For Achieving Zero-Configuration Wireless Computing And Computing Device Incorporating Same"
- US Patent No. 5,577,168 to Haas et al. disclose "Beacon Based Packetized Cellular System With Real-Time Processing"
- US Patent No. 5,301,357 to Thompson discloses "Method And System Method For Handling Improper Registrations"

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham, can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Albert T. Chou

August 20, 2007 *Ac*

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER *8/21/07*